

# Chapter 3: Recommendations

Smith Creek

## Chapter Outline:

*Methodology*

*Linkages &  
Regional Planning*

*Targeted Open  
Space Acquisition*

*Scenic Corridors*

*Greenway System  
Recommendations*

## METHODOLOGY

In light of the changes discussed in Chapter 2, it is necessary to revise some of the recommendations made in the 2002 Open Space and Greenway Plan to reflect current conditions. While many of the recommendations still hold true, some have become outdated or are unsuitable, and new ideas are needed to ensure that continued progress is made toward the completion of an interconnected open space and greenway network.

All three of the plans relating most closely to this plan update, including the Bicycle Plan, Pedestrian Plan, and Parks and Recreation Plan, involved extensive gathering of public input as well as inventories of existing conditions. This plan will draw from the findings and recommendations of each of these plans in order to explore possible connections between them as well as areas where shared interests and objectives exist. However, this plan will not simply recycle the efforts of prior plans, but will use them as a framework on which to build current recommendations and expand upon past observations and ideas.

The 2006 Wake Forest Pedestrian Plan and the 2008 Wake Forest Bicycle Plan both provide detailed recommendations based on high levels of public input (both plans as discussed in Chapter 2, pages 2-6 to 2-9). Similarly, the Parks and Recreation Plan Update relied on public input, including written public comments, survey data, discussions with Town Staff and the Greenway Advisory Board, and analysis of national trends in the preparation of its recommendations. When taken as a whole, these three plans represent a substantial amount of information to guide this update of the Open Space and Greenway Plan.

The intent of this chapter is to disseminate overlapping and related information from the aforementioned plans to increase efficiency in the planning process. Recommendations are also provided that may simultaneously advance the goals of this plan and serve the needs of various interests throughout the Wake Forest community. Overlapping recom-

mendations that have been discovered in the three plans are discussed below, some of which are already being implemented by Town departments.

*Developer Responsibility:* Nearly all of the plans reviewed cite the need for strengthening policies that require or encourage developers to increase connectivity between new development and surrounding destinations:

- “It is recommended that the Town establish a program to work with developers and homeowners to ensure that greenways are built, and that a suitable agreement for both parties is reached which guarantees long-term maintenance and security responsibilities.” (Town of Wake Forest Bicycle Plan, 2008, 3-11)
- “Local ordinances should be amended to require pedestrian facilities be built as part of a subdivision project to be extended beyond the limits of the subdivision boundaries to connect to nearby trip attractors and developments” (Town of Wake Forest Pedestrian Plan, Nov. 2006, 6.3.1)

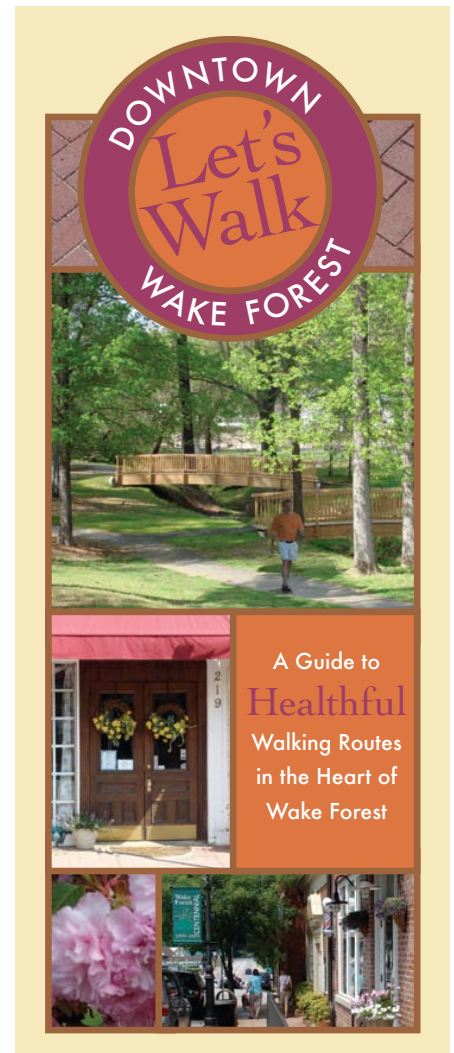
*Encouragement and Education Programs:* Encouragement, Education and Awareness programs increase public support for greenway trail development. While residents of Wake Forest have expressed a strong desire for more open spaces and greenways, there are additional strategies to increase awareness and support of greenways and their many benefits. Some commonly cited programs and policies include:

- Safe Routes to School programs.
- Regularly scheduled events with promotions, contests, education programs.
- Publish and distribute brochures with maps of bicycle and pedestrian routes, safety tips, event schedules, etc.
- Environmental education and interpretive facilities.

*Increased Connectivity:* Between neighborhoods and better access to open spaces and other destinations.

- According to the Bicycle Plan Survey, all of the respondents indicated that they would like to see more greenways in town, specifically:
  - ✓ Between neighborhoods for connections from one neighborhood to another;

*Below: The Downtown Wake Forest “Let’s Walk” Brochure is one example of an encouragement and education tool in Wake Forest.*



- ✓ From neighborhoods to downtown, parks, and schools; and
  - ✓ As connections to the Raleigh greenway system and the Falls Lake Greenways.
- According to the Pedestrian Plan, some of the main concepts derived from the interests of the Town, the steering committee, and the public include:
    - ✓ Pedestrians should be able to access Downtown Wake Forest from all parts of the community; and
    - ✓ There should be increased connectivity between subdivisions and trip attractors.

Additional studies and reports reviewed in preparation for this plan include the Land Development Plan (1985), the US 1 Corridor Plan (1999), the Inventory of the Natural Areas of Wake County (1987), the Capital Area Greenway Master Plan Update (1989), North Carolina's 303(d) List (1998 and 2008 draft) of streams deficient in water quality by Clean Water Act standards, the Wake Forest Transportation Plan (2003), Master Plan for NC 98 Bypass Corridor (2003), Renaissance Plan for the Heart of Wake Forest (2004), Wake County Consolidated and Open Space Plan (2003), and the CAMPO Bicycle and Pedestrian Plan (2003, 2005). Also, the 2008 Market Study by Buxton Co. indicates, among other findings, that over half of the people living within a 15-minute drive of Wake Forest are likely trail users.

Data were also gathered from websites maintained by the U.S. Census Bureau, the Neuse River Foundation, and other sites offering environmental and cultural information specific to Wake Forest. Finally, thematic maps were produced from Wake County Geographic Information Systems (GIS) data to graphically illustrate important conditions relative to geographic position. GIS applications are tools used to analyze spatial data and allow detailed geographic analysis. The strength of GIS applications is their ability to overlay separate layers of data and reveal patterns of interrelated landscape components.

## LINKAGES & REGIONAL PLANNING

Central to the Wake County Open Space Program is the concept of connectivity. For each of the municipal plans to function together successfully they must be completed with neighboring landscapes and municipalities in mind. Wake Forest has cultural opportunities to connect to the City of Raleigh, Rolesville and Franklin County. Natural opportunities exist to connect two premier water features in Wake County: the Neuse River and Falls Lake.



Regarding connectivity, Chapter Two of the 2006 Wake Forest Pedestrian Plan lists Cimarron, Crenshaw Hall Plantation, and the area between the Flaherty Park and Joyner Park as being in need of small sections of greenway to enhance connectivity (see proposed greenway corridors and multi-use paths on Map 2-D, page 2-8). Additionally, the 2008 Wake Forest Bicycle Plan lists some short trail segments as high priority projects, including S. Main Street from Rogers Road to Capital Blvd. (US-1), Stadium Drive from Capital Blvd. (US-1) to Rock Springs, and Rogers Road from Main Street to Heritage (see multi-purpose paths on Map 2-E, page 2-9). These trail segments would serve as good linkages within the proposed greenway system.

Since the adoption of the 2002 Open Space and Greenway Plan, there has been progress made toward increasing connectivity on both a local and regional scale. However, as was pointed out in the revised Wake County Open Space Plan, municipalities, including Wake Forest, need to improve coordination with both the County and neighboring municipalities if the goals of the County Plan are to be met. For its part, Wake Forest has done well on a number of fronts. It ranked third out of the twelve municipalities in terms of amount of open space protected (240 acres as of 2006), lagging behind only Raleigh and Cary, both of which are much larger in size. Still, Wake Forest Planning Staff, City Officials, and Parks and Recreation Staff must increase efforts to work with Wake County and neighboring municipal agencies on mutually beneficial projects and land acquisition. Efforts must also be increased on an intra-community level to raise support for land acquisition and greenway development. The Wake County Open Space Plan Update cites NIMBYism as one of the main obstacles to the implementation of the Wake Forest Open Space and Greenway Plan. In light of this, the recommendations of the Bike, Pedestrian, and Parks and Recreation plans to develop better education and encouragement programs become even more relevant. By stimulating community involvement and tying greenway and open space planning into other community concerns, organizations such as the Wake Forest Greenway Advisory Board (GAB) are working to educate local residents about the importance of greenways and open space.

Wake Forest has a primary consideration of preserving its small town charm and quality of life enjoyed by its residents. Providing greenway linkages to the community will preserve and accentuate that character. Greenways and open space will provide buffers from adjacent land uses, preserve the character of the landscape and allow people to access Wake Forest via alternative, slower-paced modes of transportation.

*“Since the adoption of the 2002 Open Space and Greenway Plan, there has been progress made toward increasing connectivity on both a local and regional scale.”*



## TARGETED OPEN SPACE ACQUISITION

As a result of community meetings, Town staff, and stakeholders' comments, it is recommended that the Town of Wake Forest supplement existing park systems with the following parks and open space acquisitions. These acquisition recommendations are broadly defined within this plan to cover geographical areas of the community which were agreed upon throughout the participatory planning process.

*Note: The Parks Plan has further expanded on these recommendations: Goal 1, Objective 1 of the Parks Plan: Provide adequate land for future development by placing a priority on land acquisition- gives top priority to Acquiring at least one community park- or metro park-size site in the area south of NC 98 Bypass.*

- *First* - We envision future development of a “central park” between the downtown area and the new bypass.
- *Second* - There is a need to establish a community park in the east-central area of the community, and there is a possibility that this park could be jointly developed in partnership with Rolesville.
- *Third* - There was a desire on the part of local residents to have a future community park in the northwestern quadrant of the community (which will be met by Joyner Park).
- *Fourth* - The Town has been provided with an opportunity to develop a future park along the Neuse River at the intersection with Capital Blvd. (US-1).

It is envisioned that these future parks will serve multiple purposes; including active and passive recreation, protection of water quality, flood plain management, and environmental education. The Wake Forest Parks Plan recommends a clear delineation of intended uses for such parks (see Chapter 8 of the Parks Plan for more information).

The third acquisition recommendation outlined above pointed to a desire on the part of residents for a community park in the northwest quadrant of the Town. This desire will undoubtedly be satisfied by the acquisition and development of Joyner Park. The designation of the land around the Town Reservoir as a natural area is also a strong step in the right direction. Less progress has been made on the vision for a “central park”, or on the development of a joint Rolesville-Wake Forest community park in the east-central area of the community. These may no longer be realistic objectives due to development pressures in that area. Still, the Parks and Recreation Plan gives top priority to acquiring at least one community park or metro park-sized site in the area south of the NC 98 Bypass. Acquiring land for a park adjacent to this greenway would allow the park to have immediate access, and would also act as a significant trip attractor.

Wake Forest has two primary vehicular ‘gateways’ into the community (Highway 98 and Capital Blvd. (US-1)) and a significant thoroughfare to be extended (Highway 98 Bypass). Each of these corridors is significant for the first impression that visitors receive as they enter Wake Forest. Many participants in the Open Space and Greenways Workshops have said that they place a high priority on the scenic value present along these roadways. Preserving open space and establishing buffers alongside these corridors will convey the small town charm that is one of Wake Forest’s greatest assets.

## EXISTING AND POTENTIAL SCENIC CORRIDORS

### HIGHWAY 98 BUSINESS CORRIDOR

The Highway 98 Business Corridor (or Durham Highway) is the oldest of the three major connectors. It is a significant access road for Falls Lake and a convenient western entry into Wake Forest. The roadway is starting to show the effects of Research Triangle growth as new housing developments radiate from Durham, Raleigh and Wake Forest. Protecting the scenic quality of Highway 98 Business is important to Wake Forest residents. While Wake Forest is certainly experiencing its share of growth the vegetated edges of Highway 98 are a reminder of Wake Forest’s more rural days.

### CAPITAL BLVD. (US-1) CORRIDOR

The Capital Blvd. (US-1) corridor is one that has already received some attention to its visual quality. In 1999, the US-1 Corridor Plan was adopted. This plan focuses on the visual resources along the corridor that include the built and unbuilt environment. Preserving open space and establishing buffers along the corridor is required according to the US-1 Corridor Plan and the NC 98 Bypass Corridor Plan. The highway is a major thoroughfare (to be converted to freeway status) for commuters to and from Raleigh. Businesses will continue to target this corridor for the visual exposure to travelers and to serve commuters that require convenient shopping destinations. Despite the difficulty of preserving the scenic resources of US 1, it is a worthy effort because of the high volume of traffic that generates perceptions of Wake Forest from the windshield.

Perhaps most importantly, Capital Blvd. (US-1) represents a major barrier to connecting the Wake Forest Greenway system to the Raleigh Greenway system, particularly along the Richland Creek Corridor. A pedestrian underpass will provide a critical bicycle and pedestrian connection to the City of Raleigh especially with the proposed highway to freeway conversion status as outlined in the US-1 Corridor Study. In addition, the Pedestrian Plan lists four Capital Blvd. (US-1) intersections as priority improvement projects, and recommends taking potential greenway corridor junctions into consideration. The stakeholder input contained in the Bicycle Plan identifies Capital Blvd. (US-1) as a real and perceived

*“Preserving open space and establishing buffers alongside these corridors will convey the small town charm that is one of Wake Forest’s greatest assets.”*

barrier to bicycling, as it “cuts” the Town from north to south. According to survey results presented in the plan, Capital Blvd. (US-1) “should provide for parallel greenway facilities or accommodations on “backage” roads that parallel the main line facility.”

### ***HIGHWAY 98 BYPASS CORRIDOR***

In August 2003, shortly after the adoption of the Open Space and Greenway Plan (which made recommendations for the NC 98 Bypass corridor), the Town adopted the NC 98 Bypass Corridor Master Plan. The Plan contains detailed design guidelines, as well as recommendations for enhancing bicycle and pedestrian circulation in and around the corridor. The major goals of the plan are to preserve and enhance the visual quality of the corridor as gateways to Wake Forest and to create an east-west pedestrian and bike route on each side of the corridor (though steep slopes in some areas will require careful planning and design). Other major goals include facilitating the vehicular transportation function of the corridor, and encouraging development that is compatible with the first three goals.

The Plan states “a 10-foot wide paved trail should be provided along each side of Bypass, between the Richland Creek greenway corridor and the eastern end of the Bypass. There should be frequent connections to the sidewalk systems in the adjacent neighborhoods, to the Town’s Richland Creek greenway system as a whole and to the Neuse River greenway.” The Plan recognizes that the corridor presents both opportunities for connectivity as well as constraints for north-south bicycle and pedestrian travel. Some of the key recommendations are:

- Grade-separated crossings should be considered at major road intersections and/or main greenway trail connections.
- At-grade pedestrian crossings should be incorporated into all the signalized intersections, with provisions for stopping safely in the median.
- Commercial and business uses...should be clustered at signalized intersections.
- Pedestrian and bicycle connections should extend from front doors of each business to nearby public sidewalks and greenways.

In terms of specific greenway recommendations, the Plan proposes a trail along “NC 98 west of Falls of Neuse Road/NC 98 Business to connect to the Falls Lake area and neighborhoods to the west.” It also proposes a multi-use trail along “NC 98 Business, starting at its western end at the Falls of Neuse Intersection, continuing past Crenshaw Manor and



transitioning to sidewalks in the shopping center area.” Finally, the Plan recommends “a trail connection to Richland Creek greenway...from the southeastern corner of Crenshaw Manor and the adjacent commercial area, via a pedestrian underpass under the Bypass just west of US 1.” The Plan also recommends that Wake Forest work with Raleigh to develop a trail along the south side of the Bypass between Falls of Neuse Road and the western Richland Creek trail connection. All of these recommendations are meant to increase connectivity and work in harmony with the Open Space and Greenway Plan.

## GREENWAY SYSTEM RECOMMENDATIONS

The future of open space and greenways in Wake Forest is envisioned as a system of outdoor spaces that function as healthy, protected ecosystems. Contiguity is critical to the concept of preserving open space in Wake Forest. The benefits of open space and greenways are maximized when they are linked together. Contiguous natural areas are better equipped to function as healthy, interrelated ecological systems. As such, they are more stable, provide more “edge” habitat for wildlife, and allow a place to retain its natural character.

This plan views these open space and greenways as more than passive recreation areas. These natural resources fulfill multiple objectives, such as progressive floodplain management, wildlife habitat, and improved water quality. Areas that are well-suited to host trails can provide passive recreation facilities, environmental education, and alternative transportation routes. As is shown by the Bicycle, Pedestrian, and Parks and Recreation Plans, greenways serve a variety of functions that are applicable to numerous aspects of community life. All of the plans just mentioned give high priority to greenway development. While each plan stresses different benefits of having an interconnected greenway system, all of them recognize that there are numerous positive spillovers, and that maintaining a system of open spaces and greenways is crucial for improving the overall quality of life in Wake Forest.

Recommendations for a system of open space and greenways in Wake Forest are based largely on community input from civic organizations, public agencies, and the general public. Corridors and open space locations were identified and presented in map form at meetings with Wake Forest staff, as well as meetings with interested parties, civic clubs, and public workshops. Most public comments received from these meetings and workshops were incorporated into the recommendations for the open space and greenways system.

Proposed greenways are located along natural and human-made linear corridors that generally follow streams and roadways within the study limits (see map 3A, page 3-10). In this manner, greenways will fulfill ob-

*“While each plan stresses different benefits of having an interconnected greenway system, all of them recognize that there are numerous positive spillovers, and that maintaining a system of open spaces and greenways is crucial for improving the overall quality of life in Wake Forest.”*

jectives related to alternative transportation, natural resource conservation, water quality, and floodplain management, in addition to their function as recreational resources. Corridors were also selected to ensure development of a continuous system of greenways located throughout Wake Forest and extending to neighboring jurisdictions.

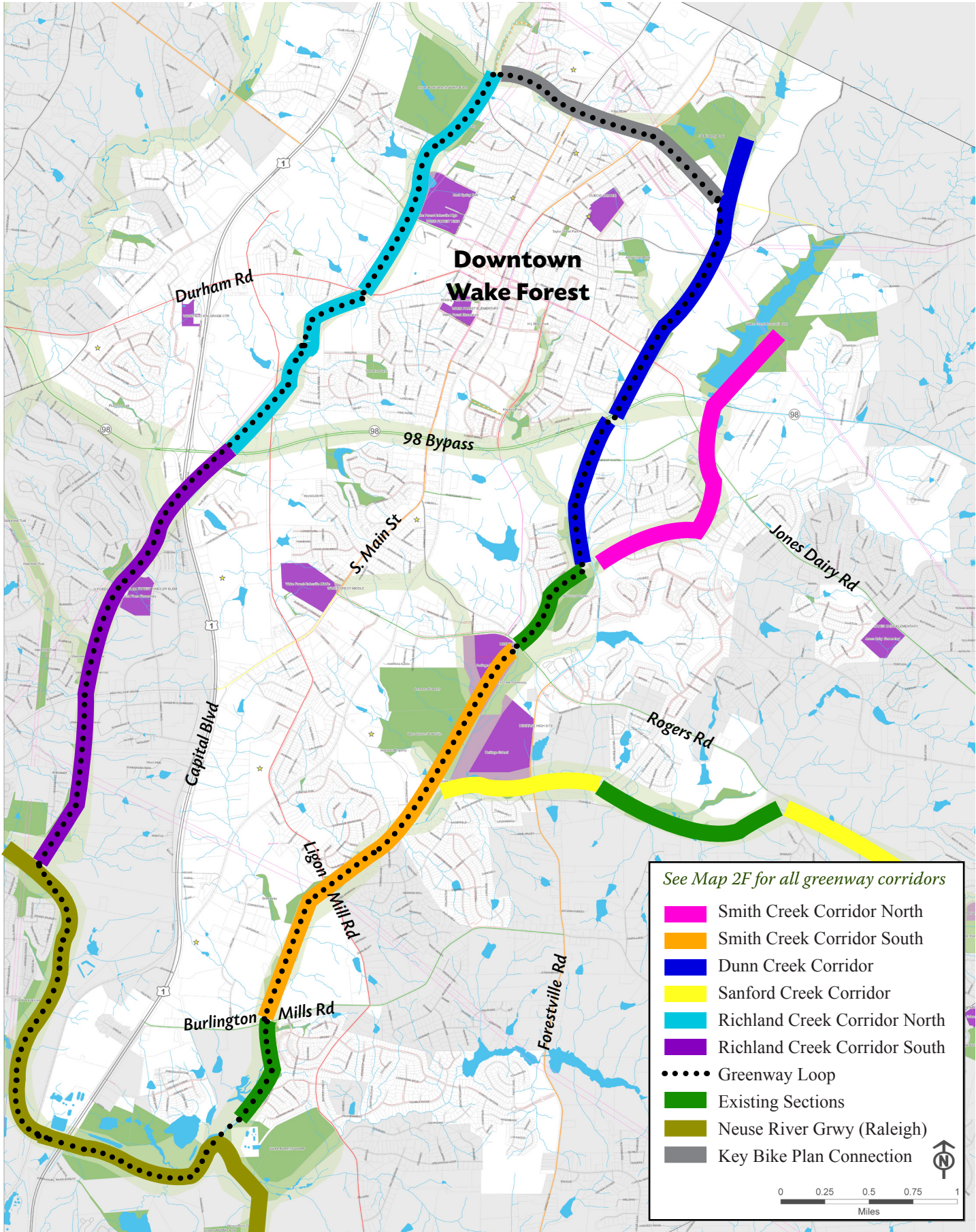
As was discussed in the 2002 Open Space and Greenway Plan, it is expected that many Wake Forest neighborhoods will want to connect their greenway systems to the larger, municipal system. This is encouraged. As the Bicycle and Pedestrian Plans make clear, there is a desire on the part of Wake Forest residents to increase the overall level of connectivity and accessibility and to create linkages between subdivisions, parks, and downtown. Private trail connection to public greenway systems can be accomplished in coordination with the Town of Wake Forest. It is recommended that the Town establish a program to work with developers and homeowners to ensure that greenways are built, and that a suitable agreement for both parties is reached which guarantees long-term maintenance and security responsibilities. It is further recommended that the Town continue their maintenance system for greenways in order to clear debris and foliage from the path to ensure safe passage by bicyclists and pedestrians, as well as enhance aesthetic appeal of the facilities.

Proposed open space areas (as opposed to greenways) are not necessarily linear corridors. Open spaces identified in this plan are larger properties that contribute to the preservation of Wake Forest's natural character and its scenic beauty as well as perform ecological functions. In fact, open space preservation does not require public access or ownership in order to meet the desired objectives. Open space protection serves as a cultural resource and/or as an environmental resource. Opportunities to educate park and trail users about the cultural and environmental resources in Wake Forest can be achieved through the creation of a central park feature. Such a facility could serve as a destination point and an organizing feature for the community and the greenway system.

The strength of executing the open space and greenways system recommendations will be in the contiguity of natural resources. However, it is not practical to consider the acquisition of properties and easements and the development of facilities as a single unit. The following pages highlight individual segments for phased development of a contiguous system. The segments are described and the objectives for incorporation are discussed.



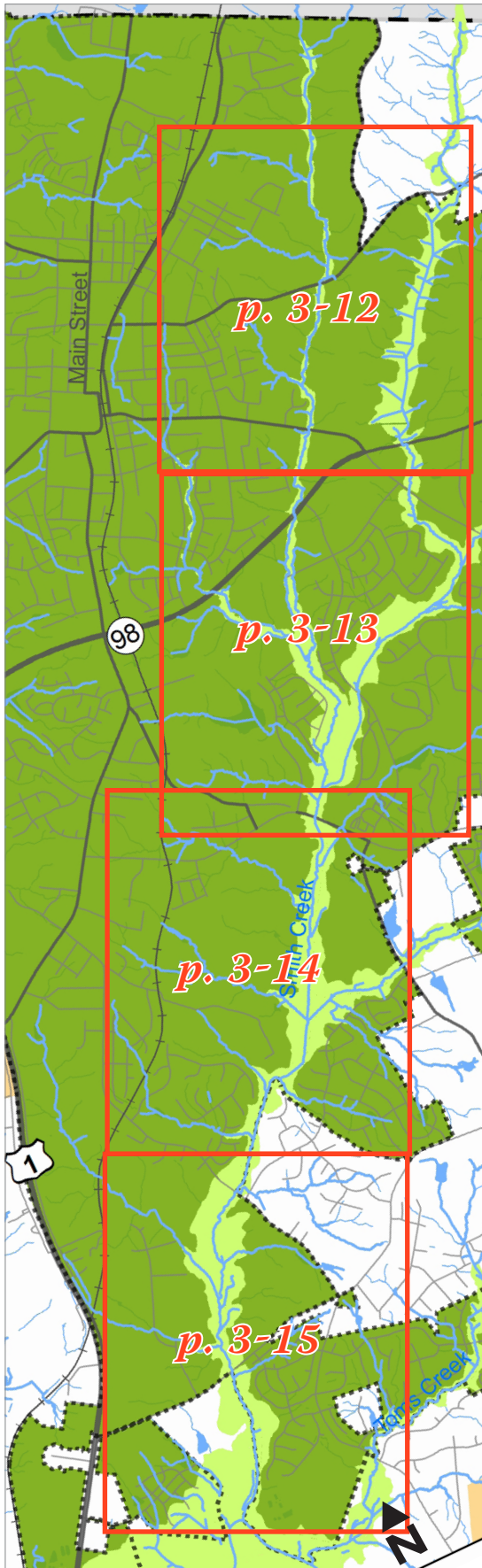
MAP 3A: REFERENCE MAP FOR PRIORITY GREENWAY CORRIDORS





**SMITH CREEK CORRIDOR (INCLUDING DUNN CREEK)**

*Locator Key for Smith/Dunn Creek  
Corridor Maps on pages 3-12 to 3-15*

*Smith Creek Corridor Description:*

Smith Creek is one of two major north-south greenway corridors proposed for Wake Forest, with some portions of trail already built (0.65 miles at Burlington Mills, 0.6 miles at the Soccer Complex, and just over one mile at Dunn Creek by spring 2009). The corridor's endpoints are the Neuse River to the south and the Franklin County Line to the north. The Smith Creek Greenway corridor follows Smith Creek from the Neuse River to the Reservoir, follows Dunn Creek from the Soccer Center to Franklin County to the north, and follows Spring Branch from Heritage North Subdivision to downtown Wake Forest. The Smith Creek corridor is the longest feature within the study boundaries and under considerable development pressures. The primary land use along the proposed corridor is single-family residential and agricultural.

*Smith Creek/Dunn Creek Corridor Objectives:*

This corridor can serve multiple objectives: First, due to the increasing number of residential dwellings, new schools, and planned bicycle and pedestrian connections to downtown, this corridor has the greatest potential to be used as an alternate transportation route. Second, a greenway along Smith Creek and Dunn Creek will also serve as a buffer to protect water quality and reduce flood damage that accompanies the increased impervious surfaces of suburbanization. Third, a complete greenway project in this increasingly populated segment of Wake Forest may stimulate interest for greenways in other areas of the Wake Forest community. Finally, this corridor could also serve as part of the East Coast Greenway, a partially built interstate trail system that will eventually connect cities from Florida to Maine.

The trail facilities in this corridor will be 10 feet wide Type 4 (Multi-Use Paved Trail), to accommodate high capacity usage. Construction of the trails must be consistent with the principles of Neuse River Riparian Buffer Rules while accommodating the expected traffic safely. Sufficient and consistent width along the corridor will be necessary to decrease pedestrian to cyclist conflicts and to discourage off path trailblazing that would result in compaction and erosion. Wake Forest should consider wider trails along substantial sections. The American Association of State Highway and Transportation Officials (AASHTO) standards and Federal Highway Administration standards recommend 10 foot wide trails, but 12 to 14 foot widths are preferred where heavy traffic is expected.

Both the Bicycle and Pedestrian Plans stress the importance of linking nearby subdivisions to the proposed Smith Creek greenway via sidewalks, bike lanes, and spur trails. The Bicycle Plan recommends a multi-use path extending from Main St. to Heritage Lake Rd. along Rogers Rd. as a short-term project. Similarly, the Pedestrian Plan lists Heritage, Smith Creek, Margots Pond, Thornrose, and Dansforth subdivisions as being in need of connections to the Smith Creek greenway.



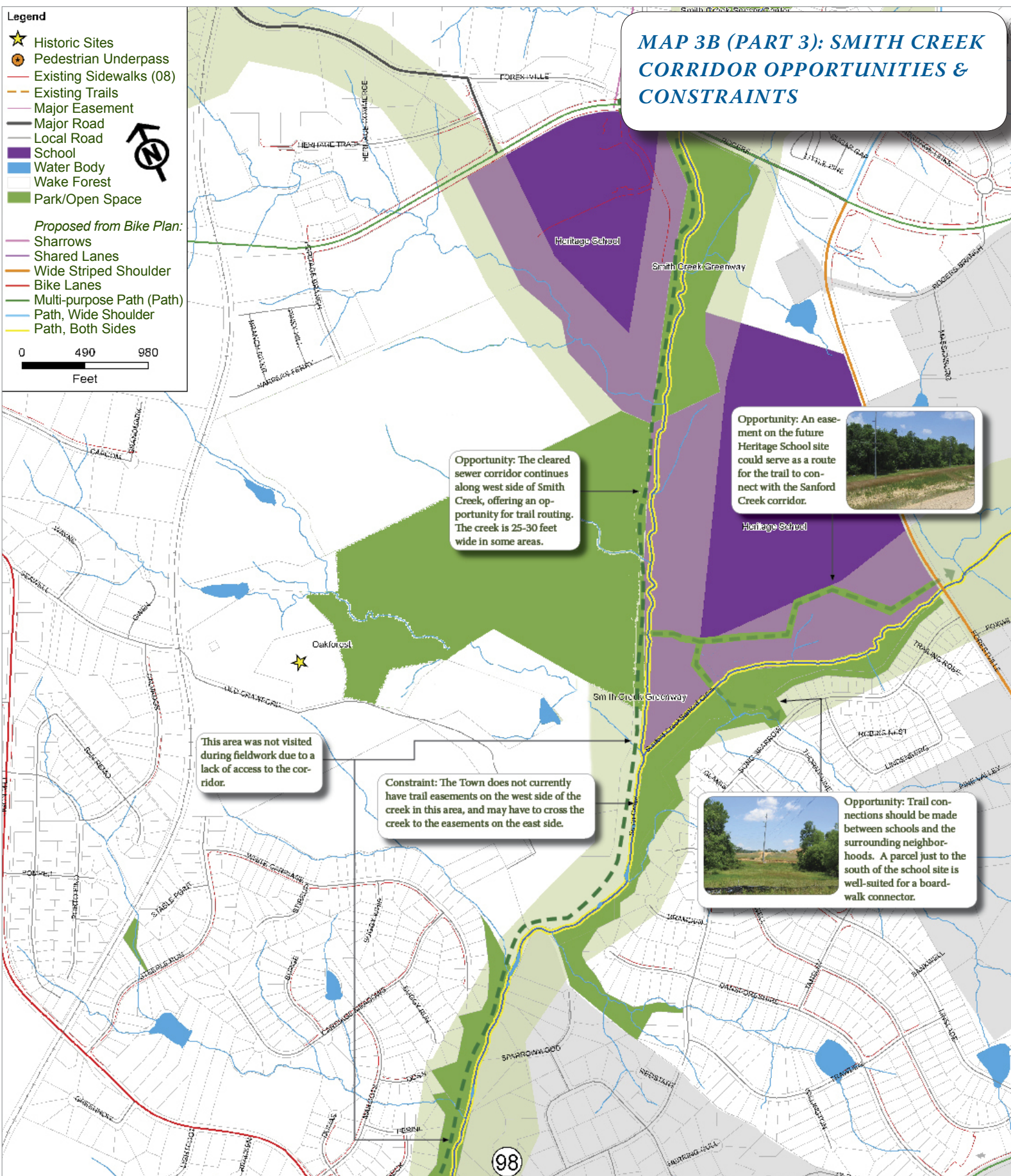




## MAP 3B (PART 2): DUNN/SMITH CREEK CORRIDOR OPPORTUNITIES & CONSTRAINTS









## MAP 3B (PART 4): SMITH CREEK CORRIDOR OPPORTUNITIES & CONSTRAINTS



## ***RICHLAND CREEK CORRIDOR***

### *Richland Creek Corridor Description:*

Richland Creek is the second longest stream in the study area. It shapes downtown by flanking it to the west. Downtown Wake Forest is situated atop the ridge that separates the Richland Creek and Smith Creek watersheds. Richland Creek flows from north to south, starting above the Wake County line and flowing south into the Neuse River. Land use along Richland Creek is primarily single-family residential and agricultural. One existing portion of trail in this corridor is the Olde Mill Stream Greenway (0.35 miles). This corridor was identified as the 3rd highest priority greenway project in the Pedestrian Plan, Chapter 7-7.

### *Richland Creek Corridor Objectives:*

The Richland Creek Corridor is well suited to serve as a greenway corridor based on current conditions. However, along the Smith Creek Greenway Corridor, more immediate action is required to acquire greenway easements and construct trails due to development pressures in that area. Richland Creek can function as a second north-south corridor that serves much of western Wake Forest. Securing the floodplain and conservation easements along the stream will protect water quality and wildlife habitat, and once funding is available, trails will be constructed along the Richland Creek Corridor. The proximity of the Richland Creek Corridor to Wake Forest/Rolesville High School provides access for students to get to and from school. Also, the Richland Creek Corridor crosses the US-1 Corridor and connects to the Neuse River Trail just below Falls Lake making it a viable alternate bicycle and pedestrian transportation corridor as well as a popular recreational amenity. Trails developed within the Richland Creek corridor should be Type 4 (Multi-Use Paved Trails) to accommodate the anticipated users. Increasing numbers of residents along this corridor will warrant a durable facility that serves the western side of Wake Forest.

Within and adjacent to the Richland Creek corridor, there are new opportunities for trail development that were not addressed in the previous plan. The Pedestrian Plan identifies the Cimarron subdivision as an excellent starting point for a connecting trail that would link residents from S. Main Street to Richland Creek via the NC 98 Bypass Trail. According to the Pedestrian Plan, “public land, homeowner association land, and public easements, as well as a storm sewer easement in the area all make this a very attainable greenway segment that should be pursued.” The Pedestrian Plan also identifies the Richland Creek Greenway as a critical long-term project that offers opportunities to “connect numerous subdivisions to the downtown pedestrian environment,” as well as provide a connection to the greenway network proposed by the City of Raleigh.

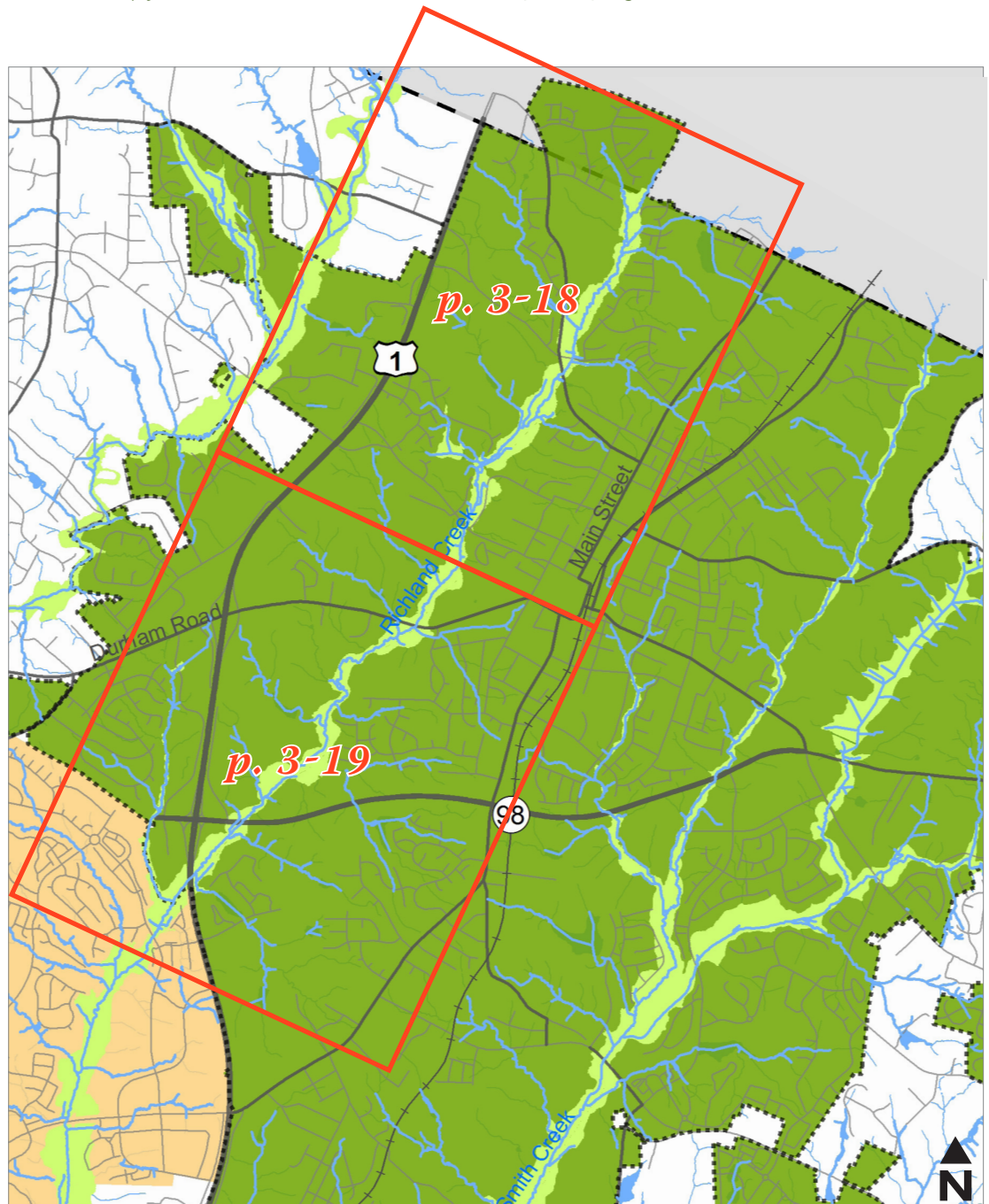


Some key facility recommendations of the Bicycle Plan that relate to this corridor include:

- A multi-use path along Stadium Dr. connecting Capital Blvd. (US-1) to Wake Forest/Rolesville High School. Continuing east along Stadium Dr. with sidewalks and sharrows would complete a connection between the Richland Creek corridor and Main Street.
- A multi-use path along Harris St. connecting Capital Blvd. (US-1) to N. Main St.

Following is a list of opportunities and constraints identified by the Consultant after inspection of the Richland Creek corridor (pages 3-18 and 3-19).

*Locator Key for Richland Creek Corridor Maps on pages 3-18 to 3-19*









## MAP 3C (PART 2): RICHLAND CREEK CORRIDOR OPPORTUNITIES & CONSTRAINTS



**Constraint:** Power easement extending north from Durham Rd is cleared and open, however steep topography will require grading or a bridge for safe crossing.



**Opportunity:** South of Durham Rd, there is potential to develop trail spur to link adjacent neighborhoods to greenway.



**Opportunity:** New development around Tyler Run Park is potential for trailhead and neighborhood greenway tie-in.



**Constraint:** Sections of the easement north of the NC 98 Bypass will require boardwalk in wet areas.



**Opportunity:** Just north of NC 98 Bypass, banks of Richland Creek are flat and well suited for a trail.



**Opportunity:** Overpass at NC 98 Bypass provides overhead clearance for trail to pass beneath along the creek.



**Opportunity:** The cleared and level openspace along the Richland creek corridor provides an excellent approach to Capital Blvd.

**Constraint:** Large-scale engineering and design efforts will be needed to accommodate trail conditions at US-1/Capital Blvd overpass or underpass.

**Opportunity:** Trail tie-ins just south of US-1/Capital Blvd will provide access to surrounding neighborhoods.



**Opportunity:** South of Durham Rd, Power and sewer easements are ideal trail conditions as they provide open flat area along the creek.



**Opportunity:** Sewer corridor behind residential neighborhoods north of NC 98 Bypass is dry and cleared.

### Legend

- ★ Historic Sites
- Pedestrian Underpass
- Existing Sidewalks (08)
- Existing Trails
- Major Easement
- Major Road
- Local Road
- School
- Water Body
- Wake Forest
- Park/Open Space

*Proposed from Bike Plan:*

- Sharrows
- Shared Lanes
- Wide Striped Shoulder
- Bike Lanes
- Multi-purpose Path (Path)
- Path, Wide Shoulder
- Path, Both Sides

0 490 980  
Feet

## SANFORD CREEK

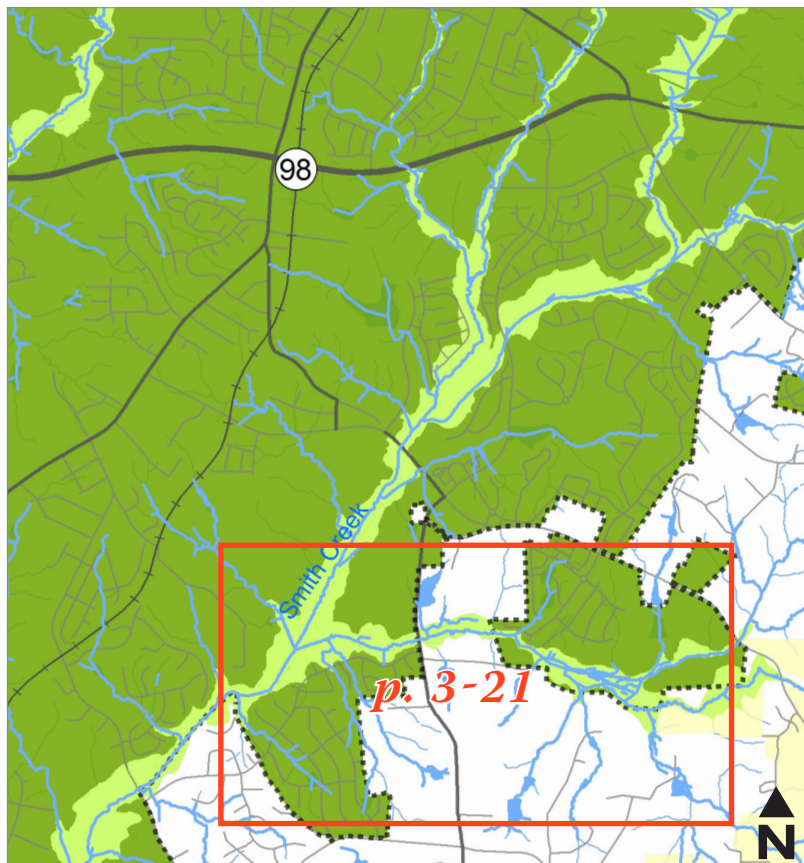
### *Sanford Creek Corridor Corridor Description:*

Sanford Creek is the easternmost stream corridor in the study area. The corridor's endpoints are Smith Creek and the Town of Rolesville. Sanford Creek provides an opportunity to connect Wake Forest with planned trails in Rolesville's planning jurisdiction. Like the Smith Creek Corridor, Sanford Creek Corridor is experiencing significant changes due to residential development, particularly at its western end. The primary land use along the corridor is single-family residential and agricultural.

### *Sanford Creek Corridor Objectives:*

The Sanford Creek Corridor is poised to serve as a pedestrian and bicycle route to school in addition to serving as a preserve for wildlife habitat, water quality, and stormwater containment. The existing trails connect just over one mile of public paved trails and boardwalk to private trails in the Heritage South subdivision. Trails under construction in Rolesville will connect to the eastern end in spring of 2009. The current end of trail is approximately one half mile east of Forestville Road and the southern boundary of Heritage High School, and one mile from the Smith Creek Corridor.

The Heritage South Section of the Sanford Creek Greenway was constructed under a public-private partnership with the developer constructing the trail in lieu of paying the recreation facility fees. The trail was constructed concurrently with the development, prior to occupation of the houses which served to increase the desirability of the lots near the trail and reduced opposition to the trail so often voiced when the trail comes long after the homes are built and occupied. A Type 4 (Multi-Use Paved Trail) greenway will serve the users well.



*Locator Key for Sanford Creek Corridor Map on page 3-21*



[INSERT 11X17 FOLD-OUT MAP]





## HORSE CREEK

### *Horse Creek Corridor Description:*

Horse Creek is the western-most stream corridor in the study area. The water in Horse Creek is clear and stream banks appear stable. The floodplain is wide and well-vegetated. Evidence suggests that the corridor supports a healthy wildlife population. The stream flows in a northeast to southwest direction before emptying into Falls Lake. Increasingly, Wake Forest is expanding westward, therefore maintaining the health of the stream should be a priority.

### *Horse Creek Corridor Objectives:*

The Horse Creek corridor is not well suited to support a trail facility, at least not in a contiguous manner. Greenway in this corridor need to be Type 1 (No Facility Development) or Type 2 (Limited Development Low Impact Uses) to ensure that surfaces are porous and do not adversely effect the water absorbing functions of the floodplain soil. If facilities in this corridor are to be constructed, special care should be taken to ensure that Neuse River rules are strictly followed. Type 2 trails have been approved for the St. Ives Subdivision. The trail dimensions will be 6' wide and the material will be 3-5" of compacted crush.

A major obstacle along the corridor is the Wake Forest Golf Club, though the future of the golf course is unknown. Passage through or around this facility for a contiguous trail is desirable, though it would be difficult to design with the necessary safety considerations addressed. Additionally, soil conditions along the upper portion of the stream would make trail construction difficult. The lower stretches of Horse Creek, within the study area and beyond, could someday provide a popular connection to Falls Lake. However, it is important to stress that the ecological health of the stream is its greatest strength and its contribution to the drinking water supply is its greatest service. All constraints considered, it is important to leave open the opportunity of a future trail, especially considering the closer of the golf course.

## TOM'S CREEK

### *Corridor Description:*

Tom's Creek is the shortest stream corridor within the study area. The stream flows east to southwest from the Rolesville area to the Neuse River. The stream passes through residential neighborhoods and a large wetland before emptying into the Neuse River.

### *Tom's Creek Corridor Objectives:*

The greatest potential for this stream is its ability to connect Wake Forest to Rolesville, contributing to a countywide effort to link Wake County communities. There are sizeable wetlands associated with Brown's Lake

at the eastern edge of the study boundary. The ecological functions of the wetlands, the cultural significance of the lake and granite dam, and the overall beauty of the corridor make it significant. However, Tom's Creek flows between residential communities that have expressed mixed feelings regarding the development of trail facilities. At the lower end of Tom's Creek there is a substantial wetland adjacent to property already owned by Wake Forest. A trail here would be of benefit to the Wake Forest community, eventually connecting to the Smith Creek Greenway and to Raleigh's greenway network via the planned bridge over the Neuse River. It could also serve as an attractive destination to view wildlife. Trails being developed in this area should be Type 2 (Limited Development Low-Impact Uses) or Type 3 (Multi-Use Unpaved).

